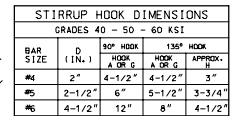


BILL OF REINFORCING STEEL

[illegible][illegible]

Figure 1 displays 32 standard cold-chamber die-cast aluminum alloy part shapes, labeled SHAPE 6 through SHAPE 32. Each shape is shown with its dimensions and a shape number.

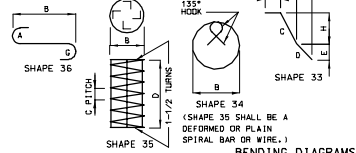
- SHAPE 6:** L-shaped profile with dimensions A, B, C, D, E.
- SHAPE 7:** U-shaped profile with dimensions B, C, D, E.
- SHAPE 8:** T-shaped profile with dimensions A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z.
- SHAPE 9:** L-shaped profile with dimensions A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z.
- SHAPE 10:** U-shaped profile with dimensions B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z.
- SHAPE 11:** T-shaped profile with dimensions A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z.
- SHAPE 12:** L-shaped profile with dimensions A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z.
- SHAPE 13:** U-shaped profile with dimensions B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z.
- SHAPE 14:** T-shaped profile with dimensions A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z.
- SHAPE 15:** L-shaped profile with dimensions A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z.
- SHAPE 16:** U-shaped profile with dimensions B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z.
- SHAPE 17:** T-shaped profile with dimensions A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z.
- SHAPE 18:** L-shaped profile with dimensions A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z.
- SHAPE 19:** L-shaped profile with dimensions A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z.
- SHAPE 20:** U-shaped profile with dimensions B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z.
- SHAPE 21:** T-shaped profile with dimensions A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z.
- SHAPE 22:** L-shaped profile with dimensions A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z. Includes note: SPOT WELD ASBESTO M33 SIZE W5 WIRE (TYP.).
- SHAPE 23:** L-shaped profile with dimensions A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z.
- SHAPE 24:** U-shaped profile with dimensions B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z.
- SHAPE 25:** L-shaped profile with dimensions A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z.
- SHAPE 26:** U-shaped profile with dimensions B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z.
- SHAPE 27:** T-shaped profile with dimensions A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z.
- SHAPE 28:** L-shaped profile with dimensions A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z.
- SHAPE 29:** U-shaped profile with dimensions B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z.
- SHAPE 30:** T-shaped profile with dimensions A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z.
- SHAPE 31:** L-shaped profile with dimensions A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z.
- SHAPE 32:** U-shaped profile with dimensions B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z.



END HOOK DIMENSIONS				
BAR SIZE	D (IN.)	ALL GRADES		
		180° HOOK	90° HOOK	90° HOOK
		A OR C	J	A OR G
#3	2-1/4"	5"	3"	6"
#4	3"	6"	4"	8"
#5	3-3/4"	7"	5"	10"
#6	4-1/2"	8"	6"	12"
#7	5-1/4"	10"	7"	14"
#8	6"	11"	8"	16"
#9	5-1/2"	15"	11-3/4"	19"
#10	10-3/4"	17"	13-1/4"	22"
#11	12"	19"	14-3/4"	21'-0"
#14	18-1/4"	21'-3"	21'-3/4"	21'-7"

TWO ADDITIONAL ARE INCLUDED IN THE BAR BILL FOR TESTING.

NOTE:
1. ALL STANDARD HOOKS AND BENDS OTHER THAN 180 DEG. TO BE BENT WITH THE SAME
PROCEDURE AS FOR 90 DEG. TWO HOOKS.
2. HOOKS AND BENDS TO BE IN ACCORDANCE WITH THE PROCEDURES AS SHOWN ON THIS SHEET.
E = EPOXY COATED REINFORCEMENT.
S = STIRRUP.
N = BAR IS INCLUDED IN SUBSTRUCTURE QUANTITIES.
V = BAR DIMENSIONS VARY IN EQUAL INCREMENTS BETWEEN DIMENSIONS SHOWN ON THIS LINE
AND THE FOLLOWING LINE.
NO. EA. = NUMBER OF BARS OF EACH LENGTH.
3. NOMINAL LENGTHS ARE BASED ON CUT TO DIMENSIONS SHOWN IN BENDING DIAGRAMS AND ARE
LISTED FOR FABRICATOR'S USE (NEAREST 1/8").
4. ACTUAL LENGTHS ARE MEASURED ALONG CENTERLINE BAR TO THE NEAREST INCH.
5. ALL REINFORCING BARS ARE TO BE BASED ON ACTUAL LENGTHS.
6. FOUR ANGLE OR CHANNEL SPACERS ARE REQUIRED FOR EACH COLUMN SPIRAL. SPACERS ARE TO BE PLACED
EQUIDISTANTLY AND TO BE 1/4" THICK. COLUMN SPIRALS DO NOT INCLUDE SPICES OR SPACERS.
7. REINFORCING STEEL (GRADE 60) = FY 60,000 PSI.



BENDING DIAGRAMS